



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/753,033 | 12/30/2000 | Timothy R. Collier | 42390P10501 | 9680 |
| 7590 | 09/22/2005 | | | |
| BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP | | | EXAMINER | |
| Seventh Floor | | | HAYES, JOHN W | |
| 12400 Wilshire Boulevard | | | ART UNIT | PAPER NUMBER |
| Los Angeles, CA 90025-1026 | | | 3639 | |
| DATE MAILED: 09/22/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/753,033 | COLLIER ET AL. | |
| | Examiner | Art Unit | |
| | Richard Woo | 3639 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 June 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Amendment

- 1) Applicant's amendments filed on June 20, 2005 have been acknowledged and entered.

Response to Arguments

- 2) Applicant's arguments, filed June 20, 2005, with respect to a rejection under 35 U.S.C. 102 have been fully considered and are persuasive. The rejection of Claims 1-23 has been withdrawn.
- 3) Applicant's arguments filed on June 20, 2005, with respect to a rejection under 35 U.S.C. 101 have been fully considered but they are not persuasive.

Although the applicant's amendment to Claim by reciting a computer in the preamble is much appreciated, there is no significant recitation of the data processing system or calculating computer for performing data processing operations in the actual claim body. The applicant would overcome the rejection by reciting a data processing system, processor or computer in the method step(s). e.g., determining by electronic manipulation..., or by a processor.

- 4) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 101

- 5) Claims 1-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In this application, there is no significant recitation of the data processing system or calculating computer for performing data processing operations in the actual claim body.

Claim Rejections - 35 USC § 112

- 6) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 7) Claims 5, 10 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 5, lines 2-3; Claim 10, line 2; and Claim 24, line 2, respectively, the recitation of "a short duration of time" renders the claim indefinite because it is based on the applicant's own subjective standard and it is not clear for one having ordinary skill in the art to determine how to measure this short duration of time (i.e., is this seconds, minutes, hours, or days?).

Claim Rejections - 35 USC § 102

8) Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 00/65506 (hereinafter WO' 506).

As for Claim 1, WO' 506 discloses a method comprising:
receiving information regarding a transaction, the transaction representing a discrete transaction for a resource item (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3);

sending from a transaction coordinator a tentative hold request for the resource items to a transaction manager causing a tentative hold record to be created and associated with the discrete transaction, the, the tentative holds operating in a non-mutually exclusive manner (see Id.); and

after successfully gaining the tentative hold on the resource items and receiving confirmation regarding the transaction, the transaction coordinator directing the commitment of the transaction (see Supra Figs. and pages).

As for Claim 2, WO' 506 further discloses the method, wherein directing the commitment of the transaction comprises initiating conventional Two-Phase Commit (2PC) prepare and commit processing for transactions (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 3, WO' 506 further discloses the method, further comprising receiving a notification indicating transaction (see Id.).

As for Claim 4, WO' 506 further discloses the method, wherein one or more of the tentative hold record is stored at an intermediate server that is not within the enterprise offering the resource item (see Supra Figs. and pages).

As for Claim 5, WO' 506 further discloses the method, wherein the non-mutually exclusive manner of the tentative hold allows the resource items to be held for a short duration of time (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 6, WO' 506 discloses a method comprising:

receiving information regarding a transaction from an originating application, the transaction involving a resource item (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3); and

initiating a tentative-hold processing stage by requesting that a plurality of resource managers residing on one or more remote servers and participating in the transaction by tentatively holding the item involved in the transaction and storing call back information identifying a return communication path to the originating application, the tentative hold record operating in a non-mutually exclusive manner (see Id.).

As for Claim 7, WO' 506 further discloses the method, wherein the remote servers are associated with different enterprises (see Supra Figs. and pages).

As for Claim 8, WO' 506 further discloses the method, further comprising:

receiving a commitment corresponding to the distributed transaction from the originating application; and

responsive to the commitment, initiating a two-phase commit processing stage by directing the resource managers to reserve the items during which the resource managers reserve the items and notifying, via corresponding call back information, other applications having a tentative hold on the same items that their respective tentative holds have been suspended (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 24, WO' 506 further discloses the method, wherein the non-mutually exclusive manner of the tentative hold allows the resource item to be held for a short duration of time (see Id.).

As for Claim 9, WO' 506 discloses a method comprising:

receiving, from a first client, a first request associated with a first discrete transaction, the first request soliciting a non-mutually exclusive hold on a resource item; the resource item being part of a first transaction (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3);

maintaining a first non-mutually exclusive hold on the resource item until an exclusive lock is obtained on the resource item or for a predetermined amount of time, whichever occurs first, by causing a first tentative hold record to be created and associated with the resource item and initiating a first timeout associated with the their tentative hold record (see Id.);

receiving, from a second client, a second request associated with a second discrete transaction, the second request soliciting a non-mutually exclusive hold on

the resource item, the resource item being part of a second atomic distributed transaction (see Supra Figs. and pages);

maintaining a second non-mutually exclusive hold on the resource item until an exclusive lock is obtained on the resource item or for a predetermined amount of time, whichever occurs first, by causing a second tentative hold record to be created and associated with the resource item and initiating a second timeout associated with the second tentative hold record (see Id.);

receiving, from the first client, a third request associated with the first discrete transaction, the third request asking that completion of the first discrete transaction commence (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3); and

responsive to the third request, suspending the second non-mutually exclusive hold and granting an exclusive lock on the resource item to the first discrete transaction (see Id.).

As for Claim 10, WO' 506 further discloses the method, wherein the first non-mutually exclusive hold allows the resource item to be held for a short duration of time (see Supra Figs. and pages).

As for Claim 11, WO' 506 further discloses the method of claim, further comprising:
storing call back information associated with an application originating the second discrete transaction; and

notifying the application regarding the suspension of the second non-mutually exclusive hold (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 12, WO' 506 further discloses the method, further comprising in response to a timeout on the exclusive lock, recommencing the second non-mutually exclusive hold on behalf of the second discrete transaction (see *Id.*).

As for Claim 13, WO' 506 discloses a distributed transaction processing system comprising:

a distributed transaction coordinator executing on a first client system, the distributed transaction coordinator to place non-mutually exclusive holds on each of a plurality of resource items associated with an atomic distributed transaction that spans a plurality of network resources and to commence completion of the atomic distributed transaction by obtaining exclusive locks on each of the plurality of resource items after non-mutually exclusive holds have been successfully granted on each of the plurality of resource items (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3); and

a distributed transaction manager executing on a server system communicatively coupled with a plurality of client systems including the first client system, the distributed transaction manager to maintain a plurality of non-mutually exclusive holds for each of a plurality of resource items associated with the server system and to grant only one

exclusive lock per single resource item of the plurality of resource items at a given time in response to requests from distributed transaction coordinators (see *Id.*).

As for Claim 14, WO' 506 further discloses the system, wherein the distributed transaction coordinator includes a Two-phase Commit transaction coordinator (see *Supra* Figs. and pages).

As for Claim 15, WO' 506 further discloses the system, further comprising one or more Two-phase Commit resource managers communicatively coupled with the distributed transaction manager (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 16, WO' 506 discloses a machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to:

receive information regarding an atomic distributed transaction, the atomic distributed transaction representing an aggregation of a plurality of discrete transactions for individual resource items that span a plurality of network resources (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3);

place a tentative hold on each of the plurality of individual resource items by causing a tentative hold record to be created and associated with each of the plurality of discrete transactions, the tentative holds operating in a non-mutually exclusive manner, thereby allowing the same resource item to be tentatively held by more than one interested party (see *Id.*); and

after successfully gaining the tentative holds on each of the plurality of individual resource items and receiving a confirmation regarding the atomic distributed transaction, attempt to direct the completion of the atomic distributed transaction by conventional means (see Id.).

As for Claim 17, WO' 506 further discloses the medium, wherein said attempt to direct the completion of the atomic distributed transaction by conventional means comprises initiating conventional Two-phase Commit (2PC) prepare and commit processing for each of the plurality of discrete transactions (see Supra Figs. and pages).

As for Claim 18, WO' 506 further discloses the medium, wherein one or more of the tentative hold records are stored at an intermediate server that is not within the enterprise offering the resource item (see Id.).

As for Claim 19, WO' 506 further discloses the medium, wherein the plurality of network resources comprise database systems of a plurality of different enterprises (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 20, WO' 506 discloses a machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to:

receive, from a first client, a first request associated with a first discrete transaction, the first request soliciting a non-mutually exclusive hold on a resource item; the resource item being part of a first atomic distributed transaction that spans a

plurality of network resources (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3);

maintain a first non-mutually exclusive hold on the resource item until an exclusive lock is obtained on the resource item or for a predetermined amount of time, whichever occurs first, by causing a first tentative hold record to be created and associated with the resource item and initiating a first timeout associated with the first tentative hold record (see Id.);

receive, from a second client, a second request associated with a second discrete transaction, the second request soliciting a non-mutually exclusive hold on the resource item, the resource item being part of a second atomic distributed transaction (see Supra Figs. and the descriptions thereof);

maintain a second non-mutually exclusive hold on the resource item until an exclusive lock is obtained on the resource item or for a predetermined amount of time, whichever occurs first, by causing a second tentative hold record to be created and associated with the resource item and initiating a second timeout associated with the second tentative hold record (see Id.);

receive, from the first client, a third request associated with the first discrete transaction, the third request asking that completion of the first discrete transaction commence (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3); and

responsive to the third request, suspend the second non-mutually exclusive

hold and granting an exclusive lock on the resource item to the first discrete transaction (see Id.).

As for Claim 21, WO' 506 further discloses the medium, wherein at least two network resources of the plurality of network resources are associated with different enterprise (see Supra Figs.).

As for Claim 22, WO' 506 further discloses the medium, wherein the sequences of instructions further include instructions which, when executed by the processor, cause the processor to:

store call back information associated with an application originating the second discrete transaction; and

notify the application regarding the suspension of the second non-mutually exclusive hold (see Figs. 1 and 6, and page 3, line 5 – page 4, line 13; page 8, line 10 – page 10, line 3).

As for Claim 23, WO' 506 further discloses the medium of claim 20, wherein the sequences of instructions further include instructions which, when executed by the processor, cause the processor to recommence the second non-mutually exclusive hold on behalf of the second discrete transaction in response to a timeout on the exclusive lock (see Id.).

Conclusion

9) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2003/0005055 is cited to show a method of scheduling a reservation at a plurality of facilities, which fall within client defined parameters, providing a plurality of services.

US 6,418,413 is cited to show a method and apparatus for producing seat availability information for a mode of travel such as airline travel produce a prediction of availability of a seat in accordance with an availability query.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3639

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard Woo
Art Unit 3639
September 17, 2005


THOMAS A. DIXON
PRIMARY EXAMINER